

What is claimed is:

1. A method for treating hair which comprises:

- a) contacting said hair with a substantially inactive mixture of oxidative hair dye precursors; and
- b) allowing said mixture to remain in said hair for a period of about 30 seconds to about 60 minutes.

2. A method according to claim 1, which further comprises:

- a) contacting said hair with a mixture of oxidizing compounds and a basifying compound;
- b) allowing said mixture to remain in said hair for a period of about 30 seconds to about 60 minutes.

3. A method according to claim 1, wherein said mixture of oxidative hair dye precursors comprises an oxidizing compound and said mixture has about an acidic pH to about a neutral pH.

4. A method according to claim 3, which further comprises:

- a) contacting said hair with a basifying compound; and
- b) allowing said basifying compound to remain in said hair for a period of about 30 seconds to about 60 minutes.

5. A method according to claim 1, wherein said mixture of oxidative hair dye precursors comprises a basifying compound.

6. A method according to claim 1, which further comprises:

- a) contacting said hair with an oxidizing compound for a period of about 30 seconds to about 60 minutes.
- b) contacting said hair with a basifying composition; and
- c) allowing said basifying compound to remain in said hair for a period of about 30 seconds to about 60 minutes.

7. A method according to claim 1, wherein said mixture of oxidative dye precursors are selected from the group consisting of m-aminophenol; 3-methyl-p-aminophenol; 2,3-dimethyl-p-aminophenol; p-phenylene diamine; p-toluenediamine; p-phenylenediamine; 2-chloro-p-phenylenediamine; N-phenyl-p-phenylenediamine; N-2-methoxyethyl-p-phenylenediamine; N,N-bis-(hydroxyethyl)-p-phenylenediamine; 2-hydroxymethyl-p-phenylenediamine; 2-hydroxyethyl-p-phenylenediamine; 4, 4'-diaminodiphenylamine; 2,6-dimethyl-p-phenylenediamine; 2-isopropyl-p-phenylenediamine; N-(2-hydroxypropyl)-p-phenylenediamine; 2-propyl-p-phenylenediamine; 1,3-N, N-bis-(2-hydroxyethyl)-N, N-bis (4-aminophenyl)- 2-propanol; 2-methyl-4-dimethylaminoaniline; p-aminophenol; p- methylaminophenol; 3-methyl-p-aminophenol; 2-hydroxymethyl-p-aminophenol; 2-methyl-p-aminophenol; 2-(2-hydroxyethylaminomethyl)-p-aminophenol; 2-methoxymethyl-p-aminophenol; and 5-aminosalicylic acid; catechol; pyrogallol; o-aminophenol; 2, 4-diaminophenol; 2,4,5-trihydroxytoluene; 1,2,4-trihydroxybenzene; 2- ethylamino-p-cresol; 2,3-dihydroxynaphthalene; 5-methyl-o-aminophenol; 6-methyl-o-aminophenol; and 2-amino-5-acetaminophenol; 2-methyl-1- naphthol; 1-acetoxy-2-methylnaphthalene; 1,7-dihydroxynaphthalene; resorcinol; 4-chlororesorcinol; 1-naphthol; 1,5-dihydroxynaphthalene; 2,7-dihydroxynaphthalene; 2-methylresorcinol; 1-hydroxy-6-aminonaphthalene- 3-sulfonic acid; thymol (2-

isopropyl-5-methylphenol); 1,5-dihydroxy-1,2, 3,4-tetrahydronaphthalene; 2-chlororesorcinol; 2,3-dihydroxy-1,4- naphthoquinone; and 1-naphthol-4-sulfonic acid; m-phenylenediamine; 2-(2,4- diaminophenoxy)ethanol; N,N-bis(hydroxyethyl)-m-phenylenediamine; 2,6- diaminotoluene; N,N-bis(hydroxyethyl)-2,4-diaminophenetole; bis(2,4- diaminophenoxy)-1,3-propane; 1-hydroxyethyl-2,4-diaminobenzene; 2-amino- 4 hydroxyethylaminoanisole; aminoethoxy-2,4-diaminobenzene; 2,4- diaminophenoxyacetic acid; 4,6-bis(hydroxyethoxy)-m-phenylenediamine; 2,4-diamino-5-methylphenetole; 2,4-diamino-5-hydroxyethoxytoluene; 2,4- dimethoxy 1,3-diaminobenzene; and 2,6-bis(hydroxyethylamino) toluene; m-aminophenol; 2-hydroxy-4-carbamoylmethylaminotoluene; m-carbamoylmethylaminophenol; 6-hydroxybenzomorpholine; 2-hydroxy-4-aminotoluene; 2-hydroxy-4-hydroxyethylaminotoluene; 4,6-dichloro-m-aminophenol; 2-methyl-m-aminophenol; 2-chloro-6-methyl-m-aminophenol; 2-hydroxyethoxy-5-aminophenol; 2-chloro-5-trifluoroethylaminophenol; 4-chloro-6-methyl-m-aminophenol; N-cyclopentyl-3-aminophenol; N-hydroxyethyl-4-methoxy-2-methyl-m-aminophenol and 5-amino-4-methoxy-2-methylphenol; 2-dimethylamino-5-aminopyridine; 2,4,5,6-tetra-aminopyrimidine; 4,5-diamino-1-methylpyrazole; 4,5-diamino-1-hydroxymethyl pyrazole, 4,5-diamino-1-hydroxyethylpyrazole; 1-phenyl-3-methyl-5-pyrazolone; 6-methoxy-8-aminoquinoline; 2,6-dihydroxy-4-methylpyridine; 5-hydroxy-1,4-benzodioxane; 3,4-methylenedioxyphenol; 4-hydroxyethylamino-1,2-methylenedioxybenzene; 2,6-dihydroxy-3,4-dimethylpyridine; 5-chloro-2,3-dihydroxypyridine; 3,5-diamino-2,6-dimethoxypyridine; 2-hydroxyethylamino-6-methoxy-3-aminopyridine; 3,4-methylenedioxyaniline; 2,6-bis-hydroxyethoxy-3,5-diaminopyridine; 4-hydroxyindole; 3-amino-5-hydroxy-2,6-dimethoxypyridine; 5,6-dihydroxyindole; 7-hydroxyindole; 5-hydroxyindole; 2-bromo-4,5- methylenedioxyphenol; 6-hydroxyindole; 3-amino-2-methylamino-6- methoxypyridine; 2-amino-3-hydroxypyridine; 2,6-diaminopyridine; 5-(3,5-diamino-2-pyridyloxy)-1,3-

dihydroxypentane; 3-(3,5-diamino-2-pyridyloxy)-2-hydroxypropanol; 4-hydroxy-2,5,6-triaminopyrimidine, and mixtures thereof.

- 5     8.     A method according to claim 1 wherein said oxidation hair dye precursor composition comprises:
- a)     about 0.001% to about 1.0% of an oxidation hair dye precursor;
  - b)     about 0.001% to about 1.0% of a second oxidation hair dye precursor; and
  - c)     an aqueous carrier.
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9.     A method according to claim 1 wherein said oxidation hair dye precursor composition comprises:
- a)     about 0.02% to about 0.1% of an oxidation hair dye precursor;
  - 15     b)     optionally about 0.02% to about 0.1% of a second oxidation hair dye precursor; and
  - c)     an aqueous carrier.
- 20     10.     A method according to claim 5 wherein said oxidation hair dye precursor composition comprises:
- a)     about 0.01 to about 10% of an oxidative compound;
  - b)     about 0.01 to about 5% of a basifying compound; and
  - c)     an aqueous carrier.
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11.     A method according to claim 11 wherein said oxidative composition comprises
- a)     about 0.1 to about 5.0% of an oxidative compound;
  - b)     about 0.1 to about 3.0% of a basifying agent; and
  - 30     c)     an aqueous carrier.

12. A method according to claim 3 wherein said mixture of oxidative hair dye precursors comprises:

- a) about 0.001% to about 5.0% of an oxidation hair dye precursor;
- b) about 0.001% to about 3.0% of a second oxidation hair dye precursor;
- c) about 0.1 to about 4.5% of an oxidative compound; and
- d) an aqueous carrier.

13. A method according to claim 12 wherein said mixture of oxidative hair dye precursors comprises

- a) about 0.1% to about 3.0% of an oxidation hair dye precursors;
- b) about 0.1% to about 3.0% of a second oxidation hair dye precursor;
- c) about 0.1 to about 4.0% of an oxidative compound; and
- d) an aqueous carrier.

14. A method according to claim 1, wherein said mixture of oxidative hair dye precursors comprising a basifying compound comprises:

- a) about 0.1 to about 1% of an oxidative compound;
- b) about 0.1 to about 3.0% of a second oxidation hair dye precursor;
- c) about 0.1 to about 1.5% of a basifying compound; and
- d) an aqueous carrier.

15. A method according to claim 2 wherein said oxidative compound is selected from the group consisting of hydrogen peroxide, urea peroxide, melamine peroxide, sodium perborate and sodium percarbonate.

16. A method according to claim 1, for treating hair which comprises providing said hair longer lasting color.

5 17. A kit for permanently coloring hair which comprises:  
a. a hair colorant composition in a container,  
b. a hair developer composition in a container, and  
b) written instructions that direct that the hair colorant part is applied to the  
10 hair as a substantially inactive mixture for about 30 seconds to about 60  
minutes.

18. A method according to claim 1, wherein the rate of oxidation of hair dye precursors/ rate of diffusion of hair dye precursors  $\leq 1$ .